

REMARKS

The Applicants thank the Examiner for the thorough consideration given the present application. Claims 1-15 are pending. Claims 1-15 are amended. Claims 1, 8, and 15 are independent. The Examiner is respectfully requested to reconsider the rejections in view of the amendments and remarks set forth herein.

Drawings

It is gratefully appreciated that the Examiner has accepted the drawings.

Claim for Priority

It is gratefully appreciated that the Examiner has recognized the Applicants' claim for foreign priority.

Acknowledgement of Information Disclosure Statement

It is gratefully appreciated that the Examiner has acknowledged the Information Disclosure Statement filed on August 9, 2006.

Rejection Under 35 U.S.C. §102(b) and §102(e)

Claims 1-4 stand rejected under 35 U.S.C. §102(b) as being anticipated by Fumio (JP 08-101324), and claim 15 stands rejected under 35 U.S.C. §102(e) as being anticipated by Neilson et al. (U.S. 6,757,458). These rejections are respectfully traversed.

Independent Claims 1 and 8

Except for the non-narrowing amendments to independent claims 1 and 8, the Applicants respectfully submit that each of independent claims 1 and 8 as originally filed is not taught or suggested by the references cited by the Examiner, including Fumio JP 08-101324.

Features of the present invention include:

- The distance L1 between the optical axes of the first and second optical fibers 1, 2 is larger than the distance L2 between the optical axis centers of the first and second lenses 3, 4.
- The light exit end of the first optical fiber, the optical axis center of the first lens and the reflection point on the reflection-type optical element 5 are placed in line.
- The reflection point on the reflection-type optical element, the optical axis center of the second lens and the entrance of the second optical fiber are placed in line.

With these features, the present invention can solve the drawback of the conventional telecentric optical system that there is little freedom of the optical design.

By contrast, Fumio (JP 08-101324) relates to an optical switch with elements 40 and 60 as described in paragraphs [0017] to [0019] and shown in FIGS. 3 and 4. However, elements 40 and 60 are transparent in the case where no voltage is applied, and become transparent in the case where a voltage is applied. In addition, the optical axes of the lens 2a, 2d and the optical axes the fibers 5a, 5b of JP 08-101324 are separated the same distance.

Thus, elements 40 and 60 do not teach the reflection-type mirror of the present invention. Nor does Fumio (JP 08-101324) teach

“a distance between optical axes of the first and second optical fibers is larger than a distance between optical axis centers of the first and second lenses;

a light exit end of the first optical fiber, the optical axis center of the first lens and a reflection point on the reflection-type optical element are placed in line”, as is required by each of independent claims 1 and 8.

At least for the reasons described above, the Applicants respectfully submit that the combination of elements as set forth in each of independent claims 1 and 8 is not disclosed or made obvious by the prior art of record, including Fumio (JP 08-101324). Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Independent claims 1 and 8 are in condition for allowance.

Further, all dependent claims are in condition for allowance due to their dependency from allowable independent claims, as well as for the additional novel limitations set forth therein.

Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. §102(b) are respectfully requested.

Independent Claims 15

While not conceding the appropriateness of the Examiner's rejection, but merely to advance the prosecution of the present application, independent claim 15 has been amended herein to recite a combination of elements including *inter alia*

two lenses in the lens portion forming a pair, and the lenses forming the pair have such shapes that the lenses are cut along a bisector perpendicular to a line connecting centers

of the lenses and in a direction substantially parallel to an optical axis, and cut portions are brought into abutment on each other.

Support for the features of claim 15, can be seen, for example in FIGS. 3-6, 17-21.

The Examiner asserts that Neilson et al. FIG. 5 teaches the above features. A careful review of Neilson et al. FIG. 5, however, shows that the center lens 505 and lens 507 abut each other in a direction perpendicular to the optical axis, rather in substantially parallel to an optical access, as set forth in independent claim 15.

At least for the reasons described above, the Applicants respectfully submit that the combination of elements as set forth in independent claim 15 is not disclosed or made obvious by the prior art of record, including Neilson et al. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Independent claim 15 is in condition for allowance.

Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. §102(e) are respectfully requested.

CONCLUSION

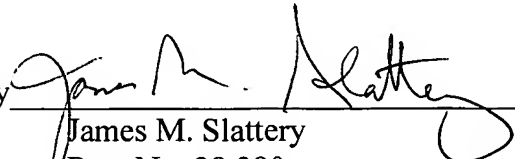
Since the remaining patents cited by the Examiner have not been utilized to reject claims, but merely to show the state of the art, no comment need be made with respect thereto.

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. It is believed that a full and complete response has been made to the outstanding Office Action, and that the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, he is invited to telephone Carl T. Thomsen (Reg. No. 50,786) at (703) 208-4030 (Direct Line).

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,
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